SCHOOL LIFE AND COMMUNITY ECONOMIC CHALLENGE: A NEWFOUNDLAND CASE STUDY

Ken Fowler Memorial University of Newfoundland

This study explored changes in student attitudes toward school life following the 1992 Newfoundland groundfishery closure. Using data extracted from a provincial quality of school life (QSL) survey, means associated with students from a sample of fishing communities were compared with provincial means. Although community students had poorer perceptions of school life both before and during the fishery closure, more positive attitudes were evident after the closure, suggesting that parental job loss may have motivated children to aspire beyond their parents' vocational achievements. However, not all communities demonstrated such a positive change. Plausible explanations for the community variability are discussed.

Key words: economic crisis, quality of school life, student attitudes, fishing communities

Cette étude porte sur les attitudes des élèves à l'endroit de la vie à l'école après la fermeture de la pêche de fond à Terre-Neuve en 1992. À l'aide de données tirées d'un sondage provincial sur la qualité de la vie à l'école, des moyennes associées à des élèves provenant d'un échantillon de villages de pêcheurs ont été comparées à des moyennes provinciales. Malgré le fait que les élèves de ces villages avaient de moins bonnes perceptions de la vie à l'école avant et pendant la fermeture de la pêche de fond, des attitudes plus positives étaient manifestes après la fermeture, ce qui donne à penser que la perte d'emploi de leurs parents peut avoir inciter les enfants à vouloir faire autre chose dans la vie que leurs parents. Le changement n'a pas été vécu d'une manière aussi positive par toutes les collectivités. L'auteur fournit des explications plausibles à ces variations.

Mots clés : crise économique, qualité de la vie à l'école, attitudes des élèves, villages de pêcheurs

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Mounting evidence suggests that when families encounter financial strain, the impact may extend throughout the entire family unit (e.g., Bryant, Zvonkovic & Renolds, 2006; Liem & Liem, 1988; Simons, Lorenz, Conger & Wu, 1992). According to the family mediation perspective, children may be particularly adversely affected through significant alterations in parenting practices as parents attempt to cope with new financial challenges (Elder, Van Nguyen, & Caspi, 1985). Several studies suggest that parents may become less nurturing, responsive, or consistent with discipline when preoccupied by the stress of job insecurity or income loss (Conger, Ge, Elder, Lorenz, & Simons, 1994; Flanagan, 1990; Lempers, Clark-Lempers, & Simons, 1989; McLoyd, 1990,1998). Accordingly, such changes may lead to increases in children's emotional distress, feelings of loneliness, depression, delinquency, or drug use (Conger et al., 1994; Lempers et al., 1989; McLoyd, 1990). In terms of prolonged changes in the dynamics of family relationships, economic distress may also result in decreased respect for parents, increased dependence on peer groups (Elder et al., 1985), constrained parent-adolescent authority relations, or negative effects on adolescent satisfaction with family decisionmaking (Flanagan, 1989).

Given the important role parents play in the academic achievement of their children (e.g., Bryant et al., 2006; Hill et al., 2004; Steinberg, Elmen, & Mounts, 1989; Steinberg, Lamborn, Dornbusch, & Darling, 1992), financial hardship may also translate into poorer school performance. Studies generally indicate that family hardship tends to be associated with negative parental-adolescent relations and decreases in parental school involvement, which in turn negatively influences adolescent's academic achievement (Conger et al., 1992; Felner, Brand, DuBois, Adan, Mulhall, & Evans, 1995; Morrison-Gutman & Eccles, 1999).

Coupled with poorer school performance, research also demonstrates that family economic strain may impact the future aspirations of young people (e.g., Elder et al., 1985). According to Flanagan (1989), youth goals may be compromised by parental demotion or job loss through changes in the roles parents portray as achievement models. Further, the restrictions caused by parental financial hardship

may also lead to reductions in spending on developmental opportunities, an act that may further condition child aspirations.

To investigate junior-high student aspirations and those of their parents (who had recently been promoted, demoted, or laid-off), Flanagan (1990) observed that parents who had experienced a demotion or job loss were more likely to report that they encouraged their children to surpass their own life achievements. However, among groups of unemployed parents, those temporarily laid off reported that, although they wanted their children to achieve more in their futures, they did not know how to prepare them, and did not consider college as a future goal. In terms of adolescent responses, aspirations generally reflected those reported by their parents. In particular, for the children of the demoted or unemployed parents, all aspired to succeed beyond their parents' achievement. However, the children of the temporarily laid-off parent group had more limited perceptions of their future options and lower academic aspirations. In addition, although adolescents of permanently laid-off parents had ambitious aspirations for the future, they demonstrated relatively low achievement behaviours, according to their teachers,

Some studies suggest that economic challenges at the community level may also influence young people. Research suggests, for example, that when major employers downsize or remove operations in highly dependent areas, decreases in school services funding may result in general reductions in educational quality. For instance, Flanagan (1990) found that unlike school professionals from districts with low unemployment rates, principals and teachers in economically depressed areas tended to report that educational services were suffering due to reductions in resources, with increases in levels of stress in their schools. In particular, principals typically reported that funds were rarely available for building repair or textbook and equipment purchasing; teachers reported increases in their workloads because courses such as physical education and music had been cut.

On a community level, youth perceptions of the viability of traditional industries within their communities also appear to impact future career ambitions. For example, Van Hook's (1990) investigation of rural adolescent responses to the Iowa farm crisis suggested that the

waning perception of farming as a secure career path often led to education as the recognised means of establishing a sounder future. Further, those intending to pursue careers in the agricultural industry planned to prepare themselves with an education beyond high school. Further, despite close community attachment, many acknowledged that their quest for a stable career would most likely take them away from their town. Overall, Van Hook's study found that the low early school leaving rate and high parental support for academic endeavours generally characterised "...a context of community support for education" (p. 81).

A logical explanation for a significant, positive shift toward educational aspirations and attainment during community economic crisis may reflect greater credence placed on its role as an opportunity provider. Indeed, educational advancement may hold the only key for many young people when their communities become economically depressed.

Others have also endorsed the notion that stressful structural and economic changes in communities tend to give rise to increased value placed on education. For instance, Crysdale (1991), who discussed a common perception of education as social leveller, suggests that education exists as the primary means of advancing up the social ranks to higher earning potential, better careers, and more opportune futures. Along a similar line of thinking, Jahoda (1982) speculates that the negative effects of unemployment may be moderated by educational attainment, stating that "...the better educated may have developed...wider horizons that may help them to mitigate some of its psychological consequences" (p. 35).

Although positive changes in perceptions of school may be an indication of higher aspirations for more lucrative and opportunistic futures during times of economic uncertainty, part of the reason for the change may also reflect its value as a source of social support. Apart from the supportive attributes of family and community networks such as friends or churches, schools may assume an important role as a supportive environment (Crysdale, 1991). Indeed, such could account for changes in the perceived desirability of the school environment.

THE PRESENT STUDY

The present investigation was designed to explore responses to the Newfoundland fishery closure among youth residing in highly affected rural communities in terms of their perceptions of school life. Based on a variety of potential outcomes documented in previous research, a number of consequences are plausible. On the one hand, as proposed by the family mediation perspective, negative changes in perceptions of school life may have occurred as families respond to severe economic However, as observed in studies assessing the quality and importance of academic involvement when entire communities experience industry crises, more favourable perceptions of school life may have resulted as academic achievement becomes an important opportunity provider, and as the school environment itself serves an important role as support resource during times of crisis. However, given that several rural communities experienced the same economic predicament, an important query of this study concerns whether all communities demonstrate the same trend in perceptions of school life. Indeed, such would offer important insight into whether and when particular outcomes might be expected when communities experience industry crises.

The Newfoundland Fishery Closure and Documented Outcomes

In 1992, the Canadian Government announced a two-year moratorium on the northern cod fishery, resulting in the termination of all harvesting activity along Newfoundland's East Coast. When subsequent evidence suggested that the fish stocks were not recovering, an indefinite moratorium was declared in 1994 for groundfisheries in the Atlantic and Quebec regions affecting approximately 40,000 workers (Economics and Statistics Branch, 1997). To compensate individuals for lost income, the Northern Cod Adjustment and Recovery Program (NCARP) was initially established providing approximately 28,000 plant workers and fishers with economic relief. When it became evident that the closure would be a long-term prospect, however, Human Resources Development Canada (HRDC) and the Department of Fisheries and Oceans (DFO) established The Atlantic Groundfish Strategy (TAGS) income support program, a \$1.9 billion initiative which ended May 1999. It is estimated that \$1.2

billion was specifically allocated to Newfoundland and Labrador with 87 per cent accounting for income support, 11 per cent for Active Programming (e.g., skills development and Adult Basic Education), and 2 per cent for administrative costs (Economic and Statistics Branch, 1997).

Although income support and opportunities for education and skills development were offered following the closure, policy makers and industry representatives could not account for the significant historical and cultural importance of the Newfoundland fishery. It is therefore not surprising that investigations into the fishery moratorium have observed increased resident stress (Atlantic Health Promotion Research Centre [AHPRC], 1999; Canadian Mental Health Association [CHHA], 1993; Fowler, 2001; Gien, 2000), tobacco and alcohol use, weight gain, and sleep disturbances (CMHA, 1993). Fowler (2001) found significant increases in mortality rates of a sample of communities most dependent upon the fishery (Fowler, 2001). Evidence from qualitative research also suggests that there has been elevated family tension and heightened friction among community residents (AHPRC, 1999; CMHA, 1993; Fowler, 2001).

In a previous qualitative study, CMHA (1998) found that young people from fishing families reported increased pressure to succeed academically to gain a competitive edge in the career market because the fishery was no longer a vocational choice. However, that study was limited in terms of its sample size and methodology. This article reports findings from a large-scale survey of student attitudes and experiences. More specifically, the present study explores student perceptions of the quality of school life before, during, and after the fishery closure announcement (i.e., 1989, 1992, and 1995) by comparing aggregate community statistics with Newfoundland and Labrador, changes in aggregate community statistics over time, and trends among individual rural communities.

METHOD

The Communities

The primary criterion for community selection was degree of dependency on income support offered through the TAGS program, which was indexed through the proportion of community residents who received program funding. Accordingly, it was reasoned that the economic effects experienced among the communities would be similar if their dependency on TAGS support were comparable. Indeed, despite the moratorium, many individuals displaced from the groundfishery were able to find work in their immediate areas in other fishery sectors such as the crab or shrimp industries, or with other sectors outside the fishery. Fundamentally, the towns included in the analyses represented areas with very little in the way of economic diversity. Based on statistics published by the Economic and Statistics Branch (1997), the communities of Bridge Harbour, White's Cove, North Point, Trap Town, Great Hill and Southern Island¹ were identified (and selected) as being among those with the highest ratio of recipients where the proportions ranged between 22 and 30 per cent.

Defining the Communities: Population and Economic Indicators

Population trends. For well over a decade, Newfoundland and Labrador has experienced a general reduction in population size. As Table 1 shows, there was a 2.9 per cent decrease in population between 1991 and 1996. The table also shows that community population reductions are quite variable, and in some cases much more pronounced in comparison to the province.

More specifically, although the combined community population reduction between 1991 and 1996 was 6.4 per cent, resident declines ranged notably from 4.1 per cent for White's Cove to 11.8 per cent for Southern Island.

Table 2 shows that the 1996 proportion of community residents between the ages of 0 and 24 years of age was actually comparable to the 1996 provincial population (i.e., 36 per cent).

Despite the fact that the communities lost a greater percentage of younger residents between 1991 and 1996, they initially had a slightly higher proportion during 1991 (41.5 per cent compared to 40.4 per cent).

Table 1
Population change between 1991 and 1996, Trap Town, Great Hill, Bridge Harbour,
Southern Island, White's Cove, North Point, communities combined, and Newfoundland
& Labrador

Community Name	1991	1996	% Change
Trap Town	1,195	1,084	-9.2
Great Hill	3,528	3,328	-5.7
Bridge Harbour	2,418	2,290	-5.3
Southern Island	1,224	1,080	-11.8
White's Cove	1,205	1,155	-4.1
North Point	1,030	982	-4.7
All Communities Combined	10,780	9,919	-6.4
Newfoundland & Labrador	568,474	551,792	-2.9

Source: Census 1991 and Census 1996 Statistics Canada

Similarly, the proportions of community residents in the 25 to 64 and the 65+ age groups were very comparable to the provincial proportions during 1996. In particular, for the 25 to 64 age group, the communities stood at 52.0 per cent while the provincial proportion stood at 53.3 per cent. Similarly, the 65+ age group accounted for 11.8 per cent of the communities' population while the provincial population of 65 + residents accounted for 10.8 per cent. Hence, although the community per cent changes were greater between 1991 and 1996, especially for the younger cohorts (i.e., –18.5 per cent compared to –13.7 per cent), the resulting age distributions for 1996 were not notably different from the provincial population.

Unemployment rate, 1991 and 1996. The communities selected for this investigation represent areas of greatest dependency on the groundfish moratorium's TAGS income support program. Apart from income support for displaced fishery workers, however, unemployment rates provided by the Government of Newfoundland and Labrador's Economic and Statistics Branch offer a more global measure of

community economic status beyond strict involvement with the groundfishery.

Table 2
Percent population change between 1991 and 1996 for 0 - 24 years, 25 - 64 years, and 65+ years, communities combined and Newfoundland & Labrador

	1991						1996	
	NF & 1	& Lab Commun		ınities	ties NF & Lab		Communities	
	No.	%	No.	%	No.	%	No.	%
0 - 24 years	229,665	40.4	4,400	41.5	198,165	35.9	3,585	36.2
25 - 64 years	283,650	49.9	5,105	48.1	294,160	53.3	5,145	52.0
65 + years	55,160	9.7	1,110	10.5	59,475	10.8	1,170	11.8
Total	568,475	100	10,615	100	551,790	100	9,900	100

% Change between 1991 & 1996

NF & Lab	Communities
%	%
-13.7	-18.5
3.7	0.8
7.8	5.4
-2.9	-6.7

Source: Census 1991 and Census 1996, Statistics Canada

Figure 1 presents unemployment rates for Newfoundland and Labrador, the communities combined and individual communities, for 1991 and 1996.

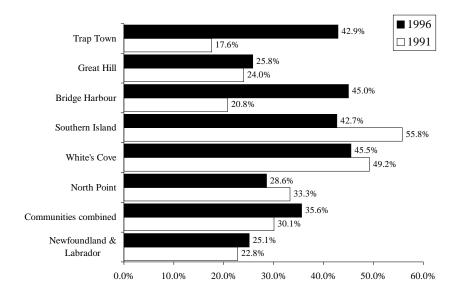


Figure 1 Unemployment rate*, Newfoundland & Labrador, communities combined, North Point, White's Cove, Southern Island, Bridge Harbour, Great Hill and Trap Town, 1991 and 1996

Source: Census 1991 and Census 1996, Statistics Canada

Although provincial and combined community unemployment rates were lower during 1991 compared to 1996, the community rates were nonetheless higher than provincial rates for both census years. For instance, during 1996, there was a 10 per cent difference between provincial and community unemployment rates (i.e., 25.1 and 35.6 per cent respectively). What is especially evident in the figure is the fact that unemployment rates for individual communities were quite variable during 1991 and 1996. In some cases, the unemployment rates were higher during 1996 (i.e., Bridge Harbour, Great Hill, and Trap Town),

^{*}Per cent unemployed of those in labour force

while in others (i.e., North Point, White's Cove, and Southern Island), the rate was higher during 1991. In 1991, rates ranged between 17.6 per cent (Trap Town) and 55.8 per cent (Southern Island). However, during 1996, unemployment rates among the communities ranged between 25.8 per cent (Great Hill) and 45.5 per cent (White's Cove).

Communities with high unemployment rates prior to the fishery closure in 1992 might have benefited most from the income support programs offered to displaced fisheries workers by the Canadian government. Because recipients of moratorium income support were not categorised as "unemployed," they were not counted in the 1996 Census in the establishment of community unemployment rates. In general, fisheries workers who were unemployed prior to the moratorium lost their status as "unemployed" when they began to receive moratorium benefits.

Average income level, 1991 and 1996. In terms of average income level, Figure 2 displays provincial and community mean annual earnings for individuals during 1991 and 1996 (note: the community figures could not be combined for this particular statistic due to the way the census information was arranged).

A number of notable trends are evident in the figure. Although the Newfoundland and Labrador average income level increased between 1991 and 1996 (i.e., from \$20,282 to \$23,346), the average income level for each community decreased. In the case of White's Cove, the 1991 average income level was substantially higher than the provincial income level (i.e., \$29,757 compared to \$20,282). However, during 1996, its income level fell by almost 50 per cent to an average of \$15,314. During 1996, average income levels for the communities ranged from \$13,122.00 in Southern Island to \$17,562.00 in Trap Town.

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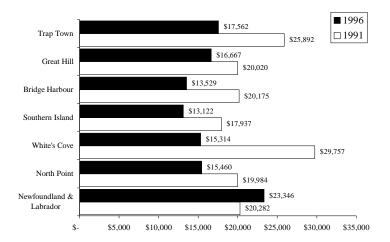


Figure 2 – Average income level*, Newfoundland & Labrador, North Point, White's Cove, Southern Island, Bridge Harbour, Great Hill and Trap Town, 1991 and 1996

Source: Census 1991 and Census 1996, Statistics Canada

Summary of Community Population and Economic Indicators. Based on comparisons between community and provincial population and economic statistics, general differences were observed. Between 1991 and 1996, the communities experienced greater overall population reductions, and greater reductions with respect to individuals less than 40 years of age. In addition, the communities experienced more pronounced population increases for individuals 45 to 54 years of age. For the 60 to 64 age group, a decrease occurred for the communities despite the fact that the province experienced a slight increase. Further, although increases occurred in the number of individuals 75 years and older for the communities and province, less of an increase was experienced by the communities.

For the province and communities (combined), unemployment rates were generally lower during 1991 compared to 1996. In addition, combined community rates were higher than provincial rates for both census years.

^{*}All persons with employment Income by work activity (Based on 20% sample)

Aside from such differences between aggregate community statistics and the province, there were substantial variations among the individual communities with respect to population and economic variables. In terms of population reductions, for instance, White's Cove experienced the lowest decline while Southern Island experienced the highest (a relative difference of approximately 8 per cent). Unemployment rates were also quite variable among the communities. In particular, the difference between the lowest (i.e., Trap Town) and highest rate (i.e., Southern Island) during 1991 was approximately 35 per cent. Average income levels also differed notably during 1996 whereby the difference between the lowest average annual income (i.e., Southern Island) and the highest (i.e., Trap Town) was more than \$4,000.00.

In general, although the communities (as a group) were shown to differ notably from the province with respect to demographic and economic indicators, community-level observations suggest that they are fairly diverse among themselves. Accordingly, (and as discussed below) it appears feasible that variations in population loss, unemployment rate, and income levels may implicate potential differences in youth responses to the fishery closure in terms of quality of school life.

The Quality of School Life Survey

In 1989, the Newfoundland and Labrador Department of Education began the process of conducting annual fall surveys of selected grade levels to understand prevailing attitudes of, and experiences with aspects of the school environment. Termed the "Quality of School Life" survey (QSL), this assessment utilises a standardised questionnaire containing more than forty items. Although some items have been omitted and new ones added over the course of its use, forty-one core items are common to all years.

QSL Survey Respondents. Throughout the course of QSL survey administrations, provincial eighth-grade students represent a group that has participated on three separate occasions, i.e., fall 1989, 1992 and 1995. For the present research, this scenario was very advantageous given the ability to extract community-level responses to a standard instrument from the same grade level before, during, and after the groundfish moratorium introduction.

Table 3 shows the number of QSL survey respondents by community, province, and year. Based on the community level population reductions between 1991 and 1996, general decreases in the number of eighth graders completing the survey among the three years were expected. Although reductions occurred for White's Cove and Southern Island between 1989 and 1995, the remaining communities did not demonstrate this trend. In fact, in the cases of Great Hill and North Point, there were actually increases in the number completing the survey between 1989 and 1995. Of course, because the survey is typically administered during one particular time period, student absenteeism could also have influenced N values.

Table 3

Number of QSL survey respondents by year and community

		Year			
	1989	1992	1995	Total	
White's Cove	39	25	26	90	
Bridge Harbour	47	42	46	135	
Southern Island	33	19	21	73	
Trap Town	38	47	35	120	
North Point	68	57	72	197	
Great Hill	65	76	102	243	
Community Total	290	266	302	858	
Provincial Total	10,146	9,055	8,153	27,354	

The QSL Questionnaire Items. The basic structure of the questionnaire includes the general statement "School is a place..." followed by a variety of standard responses. Students are asked to provide their degree of agreement or disagreement with the items on a four-point scale; i.e., 1 - definitely agree, 2 - agree, 3 - disagree, and 4 - definitely

disagree. Because of the nature of the agreement/disagreement scale of the QSL survey whereby scores of 1 and 2 represent agreement while scores of 3 and 4 represent disagreement, factor scores were reversed for the analyses so that values were easier to interpret and communicate. By reversing factor values, significantly increasing factor-means represent increases in agreement with factor themes while significant decreases represent decreases in agreement.

The QSL questionnaire was designed to capture subjective perceptions of school life such as feelings about attending school, coping with the workload, attitudes towards teachers, as well as student perceptions of their own scholastic ability. Personal feelings of sadness, restlessness, and loneliness, as well as the degree to which they felt they are able to get along with others in the school environment are also included.

RESULTS

Factor Analysis

To reduce the number of items into general themes, a Principal Components Analysis (PCA) was performed yielding six factors accounting for 55 per cent of the variance. The factor analysis was performed using the responses of students representing the entire province (i.e., 27,354 respondents over a three-year period – 1989, 1992 and 1995). The results of the analysis were subsequently applied to the community scores (i.e., community QSL items associated with each factor were combined to generate factor scores). The results of the Scree test (Cattell, 1978) confirmed that the six factors be retained.

For the present analysis, oblique (Oblimin) and orthogonal (Varimax) rotation procedures were explored. In both cases, similar themes and item-patterns emerged. Table 4 presents the results of the orthogonal (Varimax) rotation along with factor means and standard deviations. Of the forty-one items included in the analysis, thirty-three emerged with factor loadings greater than 0.50.

Table 4
Rotated factor loadings for Quality of School Life Items

QSL Items – School is a place	Factors					
	1	2	3	4	5	6
Factor 1 – Positive attitude toward attending school						
1 I really like to go 2 I feel great 3 I like to be 4 Learning is a lot of fun 5 I get enjoyment 6 I feel happy 7 I find my work interesting 8 I like all my subjects 9 I feel bored 10 I am genuinely interested in my work 11 I feel proud to be a student	0.78 0.73 0.73 0.70 0.67 0.63 0.63 0.61 -0.61 0.59					
Factor 2 – Positive attitude toward teachers						
1 Teachers treat me fair in class 2 Teachers listen to what I have to say 3 Teachers are usually fair 4 Teachers help me to do my best 5 Teachers give me the marks I deserve		0.71 0.70 0.69 0.66 0.60				
Factor 3 – Positive attitude toward school work						
1 I can handle my school work 2 I know how to cope with the work 3 I am happy with how well I do 4 I feel good about my work 5 I get satisfaction from the work I do			0.68 0.67 0.64 0.62 0.60			
Factor 4 – Belief that others perceive the positively	hem					
People think I can do a lot of things I know that people think a lot of me I feel important People credit me for what I can do				0.69 0.68 0.65 0.55		
Factor 5 – Perceptions of getting along with others						
1 I can get along with most of the students	even tho	ugh they	may	0.	72	

2	not be my friends Having different kinds of students in my class helps me get along with everyone learn to get along with other people					67 0.66	
	Factor 6 – Feelings of loneliness & sadness						
1 2 3	I feel lonely I feel sad I get upset						-0.73 -0.69 -0.68
	Mean Score	2.56	3.18	3.05	2.72	3.22	1.76
	Standard Deviation	0.64	0.64	0.56	0.61	0.58	0.63

Note: All factor loadings with a value less than 0.50 are omitted

As can be seen from Table 4, clear factor themes resulted. Factor 1 captured positive attitudes about attending school such as "I really like to go to school" and "I really like to be at school." Factor 2 comprised items associated with favourable attitudes towards teachers, e.g., "Teachers treat me fair in class" and "Teachers are usually fair." Positive perceptions about schoolwork and workload emerged in Factor 3 with items such as "I can handle my school work" and "I know how to cope with the work." Factor 4 captured student beliefs that others perceive them favourably in the school environment with statements like "People think I can do a lot of things" and "I feel important." The theme of getting along with others emerged in Factor 5 (e.g., "I learn to get along with other people") while personal feelings of loneliness and distress with school life resulted in Factor 6 (e.g., "I feel lonely").

Three Analytic Stages

Three analytic stages were developed to explore student QSL responses. For stages one and two, community QSL factor scores were combined to examine how community eighth graders compared with Newfoundland and Labrador eighth graders over the three-year time period. More specifically, the first stage focused on a comparison between aggregated community and provincial QSL means for each of the three test years, while the second centred on an examination of whether changes

occurred over time for both the province and communities. For the third analysis, variations in QSL responses for individual communities were assessed over the three time periods.

FACTOR TRENDS FOR AGGREGATED COMMUNITY AND PROVINCIAL STATISTICS

Comparison of QSL factors between Newfoundland and Labrador and the communities, 1989, 1992 and 1995. Because provincial means represent the population of Newfoundland and Labrador eighth graders, community factor means were compared to the provincial means via one-sample t-tests (two-tailed) for each year. Table 5 presents the means and t values by year for the communities and province.

For 1989, no significant differences were found between the communities and province for five of the six factors. However, community respondents demonstrated less agreement with factor 4 (Belief that others perceive them positively); the community mean was significantly lower than the provincial mean. In 1992, two community factor-means were found to be significantly lower than the provincial means: i.e., Factor 1 (Positive attitude toward attending school) and Factor 4 (Belief that others perceive them positively). These findings indicate that community students had less positive perceptions of attending school and a lower tendency to feel positively perceived by others in the school environment in comparison to the province. However, during 1995, four significant factor-differences were found between the communities and the province because community QSL means were significantly higher in all cases, indicating significantly greater agreement. The differences occurred for Factor 1 (Positive attitude towards attending school), Factor 2 (Positive attitude toward teachers), Factor 3 (Positive attitude toward school work), and Factor 5 (Perceptions of getting along with others).

Comparison of QSL Factors Among 1989, 1992 and 1995 – Newfoundland and Labrador and Communities. To assess QSL factors trends over the three-year period for the province and the communities separately, single-factor ANOVAs were performed with year as the independent

Table~5 Factor means and t values for communities and NF & Labrador, 1989, 1992 and 1995

	NF & Lab	Communities	t	df	p
Factor 1	Positive attitude towar	d attending school			
1989	2.59	2.60	0.35	241	0.73
1992	2.58	2.50*	-2.40	254	0.73
1992	2.38	2.70**	6.81	275	0.02
Factor 2	Positive attitude towar				
1989	3.21	3.17	-1.09	241	0.28
1992	3.22	3.19	-0.86	256	0.39
1995	3.09	3.18*	2.68	291	0.01
Factor 3	Positive attitude towar	d school work			
1989	3.06	3.04	-0.48	243	0.63
1992	3.09	3.03	-1.51	254	0.13
1995	3.00	3.11**	3.68	279	0.00
Factor 4	Belief that others perce	eive them positively			
1989	2.73	2.61**	-3.02	235	0.00
1992	2.74	2.62**	-3.32	254	0.00
1995	2.69	2.71	0.68	292	0.50
Factor 5	Perceptions of getting	along with others			
1989	3.29	3.32	0.98	245	0.33
1992	3.21	3.20	-0.37	257	0.71
1995	3.15	3.30**	4.59	296	0.00
Factor 6	Feelings of loneliness	& sadness			
1989	1.79	1.77	-0.59	245	0.55
1992	1.72	1.78	1.61	255	0.33
1995	1.77	1.76	-0.26	286	0.79

^{*}p<.05

variable. In terms of provincial factor-means by year, Table 6 shows that single factor ANOVAs yielded significant differences for all six factors.

^{**}p<.01

However, comparisons of factor-means for the communities yielded significant difference for factors 1 and 5 only. To establish where significant differences lay among 1989, 1992 and 1995 for the province and communities, pair-wise, post hoc comparisons (i.e., Tukey HSD tests) were conducted.

Table 6
Factor means for communities (combined) and Newfoundland & Labrador,
1989, 1992 and 1995

		1989	1992	1995		
Factor 1	Positive attitude toward att	ending				
	NF & Lab	2.59	2.58	2.49**		
	Communities (combined)	2.60	2.50	2.70**		
Factor 2	Positive attitude toward tea	nchers				
	NF & Lab	3.21	3.22	3.09**		
	Communities (combined)	3.17	3.19	3.19		
Factor 3	Positive attitude toward school work					
	NF & Lab	3.06**	3.09**	3.00**		
	Communities (combined)	3.04	3.03	3.11		
Factor 4	Belief that others perceive t	hem positi	vely			
	NF & Lab	2.73	2.74	2.69**		
	Communities (combined)	2.61	2.62	2.71		
Factor 5	Perceptions of getting along others	g with				
	NF & Lab	3.29**	3.21**	3.15**		
	Communities (combined)	3.32*	3.20*	3.30*		
Factor 6	Feelings of loneliness & sad	lness				
	NF & Lab	1.79	1.72**	1.77		
	Communities (combined)	1.77	1.78	1.76		

^{*}p<.05

^{**}p<.01

For Factor 1 (i.e., Positive attitude toward attending school), a significant change occurred for both the province and communities during 1995. However, although the provincial students decreased in agreement with the factor, the communities' students increased in agreement. In addition (as presented above), the 1995 difference between the province and communities was significant.

Although the provincial mean decreased significantly during 1995 for Factor 2 (Positive attitude toward teachers), which indicated a reduction in agreement, the community mean remained unchanged for all three years. Again, the 1995 difference between the province and communities was significant.

For Factor 3 (Positive attitude toward schoolwork), although all three provincial means were found to be significantly different from one another (i.e., a significant increase in agreement between 1989 and 1992, and a significant decrease in agreement between 1992 and 1995), no significant change was found among the community means over the three-year period. There was, however, a significant difference between the province and communities during 1995.

For Factor 4 (Belief that others perceive them positively), a significant change was found only among the provincial means (i.e., a significant decrease in the mean, and hence a decrease in agreement during 1995). In addition, as shown in the section above, community means were found to be significantly lower (indicating less agreement) than the provincial means for 1989 and 1992.

For provincial and community means for Factor 5 (Perceptions of getting along with others), the community mean decreased significantly during 1992 (indicating less agreement with this factor) and then increased during 1995. The provincial mean, on the other hand, decreased significantly during 1992 and 1995, indicating progressive disagreement with this factor. The 1995 difference between the province and communities was also significant.

For the provincial and community means associated with Factor 6 (Feelings of loneliness and sadness), the community mean increased while the provincial mean decreased during 1992. However, only the province's 1992 decrease was found to be statistically significant (indicating less agreement).

FACTOR TRENDS AMONG THE COMMUNITIES

For the analyses above, an assessment of how aggregate community QSL means varied over the three-year time period in relation with the provincial QSL means was conducted. The following analyses, however, explore the variability of QSL means among the individual communities over the three test years. To investigate community variability, the main effects of year and community as well as the interaction of these two factors were tested. The analysis of each QSL factor comprised a 3 X 6 factorial design; i.e., three years by six communities.

Community Trends for Factor 1 - Positive Attitude Toward Attending School. The results of the two-way ANOVA for Factor 1 (Positive attitude toward attending school) yielded a significant main effect for community (F(5,773) = 4.35, p < .01) as well as a significant community X year interaction (F(10,773) = 2.74, p < .01). An analysis of the simple main effects for community showed that no significant difference occurred during 1989. However, significant differences were found among the communities during 1992 (F(5,249) = 4.39, p < .01). Post hoc tests revealed that significant differences occurred among Southern Island and White's Cove (the highest mean values indicating comparatively more agreement with factor) and Trap Town and Great Hill (the lowest mean values indicating comparatively less agreement with Factor 1).

A comparison among the communities for 1995 also yielded significant differences among the communities (F(5,270) = 3.70, p < .01). Post hoc tests revealed that the Southern Island's mean was significantly lower than White's Cove's and North Point's (indicating less positive attitudes towards attending school).

Community Trends for Factor 2 – Positive Attitude Toward Teachers. In terms of Factor 2 (Positive attitude toward teachers), the 3 X 6 ANOVA resulted in a significant main effect for community (F(5,773) = 6.47, p < .01) as well as a significant community X year interaction (F(10,773) = 3.61, p < .01). Analysis of the simple main effect for community yielded a significant result for 1989 (F(5,236) = 6.97, p < .01). Post hoc tests revealed a significantly lower mean for Southern Island as compared to White's Cove, Trap Town, and North Point (indicating significantly less agreement with this factor). Further, North Point's mean was found to

be significantly greater than Bridge Harbour, Southern Island, and Great Hill (signifying significantly more agreement).

An assessment of the simple main effect for community for 1992 produced no significant differences (F(5,256) = 2.14, P > .05). However, the comparison of communities for 1995 yielded significant differences (F(5,291) = 5.46, p < .01). Post hoc tests showed that Southern Island's factor mean was significantly lower than all other communities (indicating more negative attitudes towards teachers).

Community Trends for Factor 3 – Positive Attitude Toward School Work. The analysis of Factor 3 (Positive attitude towards school work) yielded a significant main effect for community (F(5,779) = 2.90, p < .05) as well as a significant year X community interaction (F(10,779) = 2.35, p < .05). Although there was no significant simple main effect among the communities for 1989 or 1992 (F(5,243) = 1.69, p > .05 and F(5,254) = 1.42, p > .05, respectively), there was a significant simple main effect among the communities for 1995 (F(5,279) = 5.00, p < .01). Based on post hoc comparisons, Southern Island's 1995 mean was significantly lower than all other communities with the exception of Trap Town (indicating a less positive attitude toward schoolwork).

Community Trends for Factor 4 – Belief That Others Perceive Them Positively. In terms of Factor 4 (Belief that others perceive them positively), the 3 X 6 ANOVA resulted in a significant community main effect (F(5,784) = 4.37, p < .01) as well as a significant community X year interaction (F(10,784) = 3.98, p < .01). An analysis of the simple main effect for community did not reveal any significant differences for 1989 (F(5,235) = 1.14, p > .05). However, significant differences occurred among the communities during 1992 and 1995 (F(5,254) = 4.94, p < .01 and F(5,292) = 6.08, p < .01, respectively). The results of post hoc comparisons showed that Bridge Harbour's factor mean was significantly higher than that of North Point and Great Hill during 1992 (indicating more agreement with this factor), while Southern Island's mean was significantly lower than all communities during 1995 (indicating less agreement with this factor).

Community Trends for Factor 5 – Perceptions of Getting Along with Others. For Factor 5 (Perceptions of getting along with others), the results of the two-way ANOVA showed a significant community main

effect (F(5,801) = 3.57, p < .01) as well as a significant community X year interaction (F(10,801) = 2.06, p < .05). The analysis of simple main effects for community for 1989 and 1992 yielded no significant differences for the factor means (F(5,245) = 1.06, p > .05 and F(5,257) = 1.98, p>.05). However, there was a significant difference among the communities during 1995 (F(5,296) = 4.17, p < .01) where post hoc test revealed that Southern Island's factor mean was significantly lower than all other communities (indicating more negative perceptions of getting along with others).

Community Trends for Factor 6 – Feelings of Loneliness and Sadness. With respect to Factor 6 (Feelings of loneliness and sadness), the community and year main effects as well as the community X year interaction found not to be significant (i.e., (F(5, 798) = 1.99, p > .05)) and (F(10, 798) = 0.79, p > .05) respectively).

DISCUSSION

Before and during the moratorium introduction, it was observed in the present study that community students were less inclined to believe that that others perceived them positively in the school environment (during 1989 and 1992), and demonstrated significantly less positive attitudes toward attending school (during 1992). However, the 1995 survey showed that the community students demonstrated significantly more positive attitudes toward attending school, teachers, schoolwork, and reported greater perceptions of getting along with others in the school environment.

When community and provincial quality of school life indicators were compared among 1989, 1992 and 1995, it was observed in the present study that during 1995, provincial eighth graders demonstrated significant decreases in agreement with respect to positive attitudes toward school attendance, teachers, and schoolwork, as well as decreases in agreement in terms of being positively perceived by, and getting along with others in the school environment compared to 1989 and 1992. On the contrary, community students demonstrated during 1995 significantly more agreement in terms of positive feelings toward attending school. Although the significant differences between the communities and province during 1995 may be attributed to general

reductions in the perceived quality of school life for provincial students, the increased positive attitude toward school attendance for community students during 1995 suggests that indeed positive changes occurred in perceptions of the academic environment among community youth.

The general shift toward more favourable perceptions of school life during times of economic hardship is consistent with a variety of other studies, especially those investigating industry failures in highly dependent rural areas. In his an assessment of an American farming community affected by the 1980 agriculture crisis, Van Hook (1990) observed that limited career options for adolescents in terms of the farming industry gave rise to more positive and ambitious tendencies toward educational attainment for both the youth and community in Flanagan (1989) reports that when parents experience general. demotions or job loss, they tend to motivate their children to aspire beyond their own achievement levels, especially with respect to academic attainment. In addition, by observing their parents experience negative occupational circumstances such as job loss, the children themselves become personally motivated to aspire beyond their parents' achievements (Flanagan, 1989).

In terms of the school environment itself, researchers (e.g., Crysdale, 1991) have proposed that, in addition to families and other community organisations, the school environment may become a more desirable place as a vital supportive resource for community youth during times of economic and social change. Although one could speculate that positive changes in perceptions of school life represent either (or a combination of) such intrinsic, parental, or community-level influences, based on the findings of the present research, school life appears to have increased in perceived importance for the youth whose communities experienced the fishery crisis.

However, the most interesting finding of the present study concerns comparisons among individual communities where results revealed that not all experienced the same general trend toward more favourable perceptions of school life during 1995. Southern Island students in particular tended to exhibit negative changes in terms of attitudes toward attending school and schoolwork, the belief that others perceive them positively, and perceptions of getting along with others. Some

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plausible explanations explicate why negative perceptions of school life occurred among Southern Island's youth. Based on Southern Island's relatively low average individual income and high level unemployment, greater economic challenges seem to have existed within community. Perhaps during such extreme financial/occupational stress, some propositions of the family mediation model may apply. That is, perhaps there is a point where parents, left to negotiate severe and prolonged economic strain, do demonstrate negative changes in parenting in terms of nurturing and discipline consistency, which may indeed translate into child issues such as emotional distress, feelings of loneliness, depression, and delinquency (Lempers et al., 1989; Conger et al., 1994), thus leading to more negative perceptions of the school experience (Conger et al., 1992; Felner et al., Morrison-Gutman & Eccles, 1999). In addition, significant financial strain may have compromised the ability for parents to fund developmental opportunities for their children which may have also influenced perceptions of school life (Flanagan, 1989). So, perhaps degree and duration of family economic hardship may be prime mediators of youth responses as observed in attitudes toward school life.

In a previous qualitative study exploring the health and social effects of the fishery closure in Southern Island, Fowler (2001) noted evidence that the unique challenges associated with extreme economic conditions faced by residents of Southern Island residents wherein respondents tended to overemphasise how families continue to experience significant economic strain and uncertainty, especially since the TAGS income support program ended.

Further, salient variations occurred among the communities in terms of population statistics which allow speculation as to why Southern Island's youth might have experienced some difficulty with school life relative to the other communities. Southern Island had the largest population decline between 1991 and 1996, thus implicating significant out migration from the town. Again, as reported in Fowler's (2001) study, residents did propose that the periodic and prolonged migration of parents from the community for educational or occupational purposes had a detrimental effect on the general mental and emotional well being of children who were typically left behind with relatives or neighbours

in the community. So, in addition to family strain due to financial preoccupation, families may have experienced a physical disintegration largely as a function of out migration.

In addition to the forced mobility of family members, high out migration may have another indirect effect on the school experience among community youth. In particular, there are studies suggesting that decreases in the availability of municipal tax bases, and the potential for financial donations through voluntary means, may have an impact on the ability for schools to sponsor extra-curricular opportunities for the children (e.g., sports, drama, music), as well as general school maintenance and curriculum diversity (e.g., Flanagan, 1989). Indeed, evidence from the Southern Island interviews (Fowler, 2001) suggests that the ability for residents to donate funds for particular community causes declined notably since the fishery closed, and that resources for the local school (in terms of professional resources and educational supplies) were accordingly compromised.

Hence, the negative perceptions of school life on the part of Southern Island students may reflect a variety of influences: a) the disruption of the family dynamic as parents attempt to negotiate their extreme financial challenges, b) the inability of parents to fund developmental opportunities of a scholastic nature, c) the loss of parents/guardians from the town as residents pursue employment/educational opportunities elsewhere, or d) decreases in curriculum diversity or limited extracircular activities due to decreases in school-system funding and volunteerism.

Because individual communities were found to vary in terms of student QSL responses, findings of the present study allow for speculation, to some extent, on the conditions (i.e., economic/demographic) necessary for particular student perceptions of school life. Unfortunately, QSL data requested from Newfoundland and Labrador's Department of Education were unavailable by student gender. It may be that gender variability might have offered significantly more insight into why school life perceptions altered following the fishery closure.

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NOTES

 $^{\scriptscriptstyle 1}$ All communities have been given fictitious names to preserve anonymity.

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Ken Fowler is a professor in the Department of Psychology, Memorial University of Newfoundland. Dr. Fowler's interests may be described as applied health research with a social focus. Some of his work to date includes unemployment and health, HIV/AIDS and stereotypes, and social determinants/consequences of problem gambling and depression, and consequences of health system restructuring.